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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/834,238

04/11/2001

John M. Baron

10005757-1

5838

7590

04/21/2004

HEWLETT-PACKARD COMPANY
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EXAMINER

PATEL, KANJIBHAI B

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 04/21/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,238

Applicant(s)

BARON, JOHN M.

Examiner

Kanji Patel

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) 8-51 and 57-91 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 52-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention.

Species I corresponds to Figure 1 (corresponding claims 1-7 and 52-56).

Species II corresponds to Figure 4 (corresponding claims 8-25).

Species III corresponds to Figure 5 (corresponding claims 26-45).

Species IV corresponds to Figure 6 (corresponding claims 46-48 and 57-65).

Species V corresponds to Figure 7 (corresponding claims 49-51).

Species VI corresponds to Figure 8 (corresponding claims 66-91).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic claim.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with **Leslie P Gehman** on **4/9/04** a provisional election was made without traverse to prosecute the invention of **Species I, claims 1-7 and 52-56**. Affirmation of this election must be made by applicant in replying to this Office action. **Claims 8-51 and 57-91** are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Drawings

2. Drawings filed on 4/11/01 have been approved by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 52-56 are rejected under 35 U.S.C. 102 (b) as being anticipated by Abe (US 5,568,194).

For claim 1, Abe discloses a method for removing flash artifacts (figures 1 and 3) comprising the steps of:

a) capturing a first digital image of a subject (step 104 in figure 3; photographing without flash of light acts as a first digital image);

b) capturing a second digital image of said subject with the use of a flash (step 106 in figure 2 is a second digital image with a flash)

c) creating a difference image of said first and second digital images (step 111 provides a difference image; see column 5, lines 23-26);

d) applying a threshold to said difference image to create an artifact image (in steps 112 and 114, the luminance of difference image is compared with the threshold

values S1 and S2 giving results of steps 113, 115 and 116; step 113 provides an artifact image); and

e) subtracting said artifact image from said second digital image, resulting in a final digital image (steps 117 and 118 provide a final image after white balance adjustment or correction to remove flash artifacts).

For claim 2, Abe discloses a method for removing flash artifacts wherein said artifact image is multiplied by a factor (column 4, lines 18-28; differential color signals are multiplied by coefficients A_b and A_r) before the step of subtracting said artifact image from said second digital image.

For claim 3, Abe discloses a method for removing flash artifacts wherein said artifact image is offset by a factor before said step of subtracting said artifact image from said second digital image (column 4, lines 18-28).

For claim 4, Abe discloses a method for removing flash artifacts wherein said difference image comprises intensity data (column 3, lines 52-65; column 4, lines 13-17).

For claim 5, Abe discloses a method for removing flash artifacts further comprising the step of: f) storing said final digital image in a memory device (column 4, lines 48-51).

For claim 6, Abe discloses a method for removing flash artifacts wherein said threshold can be set by a user (column 5, lines 45-58; S1 and S2 are predetermined threshold values, but can be adjusted by the user of the camera which is inherited in operating of the camera).

Art Unit: 2625

For claim 7, Abe discloses a method for removing flash artifacts wherein said threshold is calculated from a histogram of said difference image (figure 5 reads on histogram).

For claim 52, see the rejection of claim 1 above.

For claim 53, see the rejection of claim 4 above.

For claim 54, see the rejection of claim 5 above.

For claim 55, see the rejection of claim 6 above.

For claim 56, see the rejection of claim 7 above.

Other prior art cited

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marni (US 6,285,410 B1) disclose a method and system for removal of flash artifacts from digital images.

Miyadera (US 5,550,587) discloses a white balance adjustment device for a still video camera having an electronic flash.

Mir (US 4,285,588) discloses an apparatus and method for minimizing red-eye in flash photography.

Eschbach (US 6,718,051 B1) discloses a red-eye detection method.

Kinjo et al. (US 6,631,208 B1) disclose an image processing method.

Art Unit: 2625

Contact information

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Kanji Patel** whose telephone number is (703) 305 4011. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 6:30 p.m. Friday off.

If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, **Mehta , Bhavesh**, can be reached on (703) 308- 5246.

Any inquiry of general nature or relating to the status of this application should be directed to the **Group receptionist** whose telephone number is (703) 305-3800. The

Fax number for this group is (703) 872-9306.



Kanji Patel
Patent Examiner
Group Art Unit 2625
April 14, 2004